

Title (en)  
METHOD FOR FABRICATING CHIRPED FIBER BRAGG GRATINGS

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON FASER-BRAGG GITTERN MIT SICH KONTINUIERLICH VERÄNDERLICHER GITTERKONSTANTE

Title (fr)  
PROCEDE DE FABRICATION DE RESEAUX DE BRAGG A FIBRES A COMPRESSION D'IMPULSIONS

Publication  
**EP 1430343 A1 20040623 (EN)**

Application  
**EP 02803958 A 20020822**

Priority

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- US 94094701 A 20010828

Abstract (en)  
[origin: US2003048988A1] A chirped Bragg grating is fabricated in an optical fiber by exposing the fiber to a coherent beam of light through a parallel phase mask having a series of progressively chirped segments produced on a lithography tool. The chirped phase mask is fabricated by exposing a photoresist-coated substrate to an image writing element such as an electron beam or a laser according to a set of parameters provided to the lithography tool. The parameters include a basic grating pattern for each segment, a value that defines the expansion or contraction of the grating pattern and an axis location to which the grating pattern is to be written to the substrate. By selecting machine commands that implement these parameters with a minimum throughput overhead, the mask can be produced in a reduced time, and therefore with increased accuracy.

IPC 1-7  
**G02B 6/34**

IPC 8 full level  
**G02B 6/02** (2006.01); **G03F 1/34** (2012.01); **G03F 7/00** (2006.01)

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